

IN THE CLAIMS:

Please rejoin claims 98 and 101, which were previously withdrawn in response to a restriction requirement, and please amend claim 98 as indicated. Accordingly, please amend the claims to read as follows:

Claims 1-77 (canceled).

78. (Previously added and previously amended) A microparticle comprising a core and electrochemiluminescent moieties within said core, wherein said electrochemiluminescent moieties are metal-containing electrochemiluminescent moieties.

79. (Previously added) The microparticle of claim 78, wherein said electrochemiluminescent moieties are blended within said core.

80. (Previously added) The microparticle of claim 78, wherein said core is polymeric and said electrochemiluminescent moieties are blended within said core.

81. (Previously added) The microparticle of claim 78, wherein said core comprises plastic and said electrochemiluminescent moieties are blended with said plastic to form said core.

82. (Previously added) The microparticle of claim 78, wherein said electrochemiluminescent moieties are enclosed within said core.

83. (Previously added) The microparticle of claim 78, wherein said core is a liposome and said electrochemiluminescent moieties are enclosed within said liposome.

84. (Previously added) The microparticle of claim 78, wherein said core comprises pores and said electrochemiluminescent moieties are enclosed within said pores.

85. (Previously added) The microparticle of claim 78, wherein said electrochemiluminescent moieties comprises transition metals.

86. (Previously added) The microparticle of claim 78, wherein said electrochemiluminescent moieties comprises Ru, Os, or Re.

87. (Previously added) The microparticle of claim 78, wherein said core is electrically conductive.

88. (Previously added) The microparticle of claim 78, wherein said core comprises metal.

89. (Previously added) The microparticle of claim 78, wherein said core comprises gold, silver, platinum, palladium, zinc, iron, nickel, lead or copper.

90. (Previously added) The microparticle of claim 78, wherein said core comprises gold, silver, platinum, or palladium.

91. (Previously added) The microparticle of claim 78, wherein said core comprises gold.

92. (Previously added) The microparticle of claim 78, wherein said core comprises carbon.

93. (Previously added) The microparticle of claim 78, wherein said core comprises carbon black, graphitic nanotubes or fullerenes.

94. (Previously added) The microparticle of claim 78, further comprising an assay ligand.

95. (Previously added) The microparticle of claim 94, wherein said assay ligand is selected from the group consisting of proteins, nucleic acids, lipids, steroids, carbohydrates, porphyrins, alkaloids, nucleotides, nucleosides, amino acids, fatty acids, viruses, microorganisms, biological cells, and subcellular particles.

96. (Previously added) The microparticle of claim 94, wherein said assay ligand is selected from the group consisting of proteins and nucleic acids.

97. (Previously added and previously amended) An assay composition comprising the microparticle of claim 78 and at least one assay component selected from the group consisting of electrochemiluminescence co-reactant and binding reagent.

98. (Previously withdrawn and currently rejoined and amended) A method for conducting electrochemiluminescence measurements for a binding analyte-of-interest comprising the steps of:

- (a) forming a complex comprising:
 - (i) said analyte,
 - (ii) a microparticle comprising a core and electrochemiluminescent moieties within said core and having one or more copies of an assay-ligand immobilized on its surface, **wherein said electrochemiluminescent moieties are metal-containing electrochemiluminescent moieties;** and
 - (iii) an assay-ligand immobilized on an electrode; and
- (b) conducting an electrochemiluminescence measurement at said electrode in the presence of electrochemiluminescence reactants.

99. (Previously added) The microparticle of claim 78, further comprising one or more copies of an assay-ligand immobilized on its surface.

100. (Previously added) A microparticle comprising metal-containing electrochemiluminescent moieties within said microparticle.

101. (Previously withdrawn and currently rejoined) The method of claim 98, wherein said assay-ligand immobilized on said surface and/or said assay-ligand immobilized on said electrode are capable of specifically binding with said analyte of interest.

102. (Previously added) The microparticle of claim 78, wherein said microparticle has a diameter greater than 5 nanometers.

103. (Previously added) The microparticle of claim 78, wherein said microparticle has a diameter between 5 nanometers and 10 micrometers.

104. (Previously added) The microparticle of claim 78, wherein said microparticle has a diameter between 20 nanometers and 200 micrometers.

105. (Previously added) The microparticle of claim 78, wherein said microparticles are spherical, oblong, rod-like or irregular in shape.